

The Honorable James L. Robart

UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

MICROSOFT CORPORATION, a Washington
corporation,

Plaintiff,

v.

MOTOROLA, INC., and MOTOROLA
MOBILITY, INC., and GENERAL
INSTRUMENT CORPORATION,

Defendants.

CASE NO. C10-1823-JLR

MOTOROLA, INC.'S OPENING CLAIM
CONSTRUCTION BRIEF

HEARING DATE:
March 9, 2012 at 9:00 a.m.

MOTOROLA MOBILITY, INC., and
GENERAL INSTRUMENT CORPORATION,

Plaintiffs/Counterclaim Defendant,

v.

MICROSOFT CORPORATION,

Defendant/Counterclaim Plaintiff.

MOTOROLA, INC.'S OPENING CLAIM CONSTRUCTION
BRIEF
CASE NO. C10-1823-JLR

SUMMIT LAW GROUP PLLC
315 FIFTH AVENUE SOUTH, SUITE 1000
SEATTLE, WASHINGTON 98104-2682
Telephone: (206) 676-7000
Fax: (206) 676-7001

Pursuant to Local Rule 134 and the Court's instructions at the hearing on January 24, 2012 (Dkt. 167), Plaintiffs Motorola Mobility, Inc. and General Instrument Corporation (collectively "Motorola") submit the following opening claim construction brief regarding U.S. Patent Nos. 7,310,374 ("the '374 Patent"); 7,310,375 ("the '375 Patent"); and 7,310,376 ("the '376 Patent") (collectively, "the Motorola Asserted Patents").

I. INTRODUCTION

The Motorola Asserted Patents share a common specification that relates to video coding and, in particular, to a video coding standard known as "H.264." Each of the asserted claims is directed to a system or method for decoding H.264 digital video content.

Motorola proposes that the language of the asserted claims should be given its plain and ordinary meaning, except to the extent particular terms (*e.g.*, "macroblock") are terms of art, such that special construction may be required. With one exception, Microsoft, on the other hand, asks this Court to read additional limitations into the plain language of the claims. The one exception is "macroblock"—a term for which Microsoft proposes a broad construction that deviates from that term's consistent usage in the Motorola Asserted Patents and in the art.

Microsoft's approach is inconsistent with the intrinsic record of the Motorola Asserted Patents and with the law prohibiting limiting claims to preferred embodiments of the patent. Motorola's proposed claim constructions are proper and should be adopted.

II. LEGAL STANDARD

The first step in any patent infringement or validity analysis is claim construction, a process by which the scope and meaning of a patent's claims are determined. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454 (Fed. Cir. 1998). Construction begins with the language of the claims themselves. Generally, claim terms are given their "ordinary and customary" meaning, which is the meaning the term would have to a person of ordinary skill in the art as of the filing date of the patent application. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc). Additionally, the Court must consider the context of the surrounding words of the

1 claim when construing the term. *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir.
2 2003). The Court must then proceed beyond the bare language of the claims to examine the patent
3 specification. *Phillips*, 415 F.3d at 1314-15. The patent specification may incorporate by
4 reference other materials by clearly citing such materials. *Advanced Display Sys., Inc. v. Kent*
5 *State Univ.*, 212 F.3d 1272, 1282 (Fed. Cir. 2000).

6 After considering the claim language and the specification, a court may consider the final
7 piece of intrinsic evidence, the patent's prosecution history. *Vitronics Corp. v. Conceptronic, Inc.*,
8 90 F.3d 1576, 1582 (Fed. Cir. 1996). "[S]tatements made during the prosecution of a patent may
9 affect the scope of the invention." *Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1343 (Fed.
10 Cir. 2001).

11 Finally, a court may consult extrinsic evidence, such as dictionaries, treatises and expert
12 testimony for background information and to "shed useful light on relevant art." *Phillips*,
13 415 F.3d at 1317 (internal quotations omitted). In general, this type of evidence is less reliable
14 than intrinsic evidence in determining the meaning of claim terms and is "unlikely to result in a
15 reliable interpretation of patent claim scope unless considered in the context of the intrinsic
16 evidence." *Id.* at 1318-19.

17 In addition to these general principles, special rules govern the construction of claim terms
18 drafted pursuant to 35 U.S.C. § 112(6)—so-called "means-plus-function" terms. Under § 112(6),
19 a means-plus-function limitation recites a "function without the recital of structure, material or
20 acts in support thereof." Such limitation is construed "to cover the corresponding structure,
21 material, or acts described in the specification and equivalents thereof." *Id.* The claimed function
22 is determined as a matter of law. *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc.*,
23 145 F.3d 1303, 1308 (Fed. Cir. 1998). Then, the structure disclosed in the specification is
24 identified to determine the meaning of the "means" term. *Id.*

III. CLAIM CONSTRUCTION

The parties have agreed to constructions for a number of claim terms. *See* Joint Claim Construction and Prehearing Statement (Dkt. 170). The parties, however, dispute the constructions of other claim terms and, per the Court’s instructions (Dkt. 167), have identified ten such terms for briefing and argument for this initial *Markman* proceeding. As discussed below, Motorola’s constructions are fully supported by the intrinsic evidence and are fully consistent with how a person of ordinary skill in the art would understand these terms.

(i) “macroblock”

Claim Term for Construction	Proposed Constructions
macroblock (‘374 Patent Claims 8, 14; ‘375 Patent Claims 6, 13, 17; ‘376 Patent Claims 14, 15, 18-20, 22, 23, 26-28, 30)	Motorola - a picture portion comprising a 16×16 pixel region of luma and corresponding chroma samples
	Microsoft - a rectangular group of pixels

The term “macroblock” is central to the claims of the Motorola Asserted Patents and is a well-known term of art. The parties dispute whether the term “macroblock” refers to a block of pixels of a particular size to one of skill in the art. It does—it is a 16×16 block of pixels.

The construction of the term “macroblock” is driven by the explicit definition provided in the H.264 Standard, which is *incorporated by reference* into each of the Motorola Asserted Patents.¹ *See Intel Corp. v. Altimia Comm. Inc.*, 275 F. Supp. 2d 1236, 1246 (E.D. Cal. 2003) (meaning of “repeater management” must satisfy definition of repeater management in IEEE 802.3 Standard, as patent specification incorporated that standard by reference). As defined in the Joint Final Committee Draft of the H.264 Standard, a macroblock is “[t]he 16×16 luma samples

¹ The Motorola Asserted Patents incorporate by reference “[t]he documents establishing the MPEG-4 Part 10 AVC/H.264 standard,” Ex. A at 4:35-47; Ex. B at 4:35-47; Ex. C at 4:35-47, and explain that “*the present invention relates to frame mode and field mode encoding of digital video content at a macroblock level as used in the MPEG-4 Part 10 AVC/H.264 standard video coding standard.*” Ex. A at 1:17-20 (emphasis added); Ex. B at 1:17-20; Ex. C at 1:17-20.

1 and the two corresponding blocks of chroma samples.”² Ex. N at MS-
 2 MOTO_1823_00001461773.³ This is an explicit definition. It should be adopted.

3 The current version of the H.264 Standard (March 2010) includes a
 4 similar definition:

5 A 16×16 block of luma samples and two corresponding blocks of
 6 chroma samples of a picture that has three sample arrays, or a 16×16
 7 block of samples of a monochrome picture or a picture that is coded
 8 using three separate colour planes.

9 Ex. X at MOTM_WASH1823_0055404.

10 The inventors of the Motorola Asserted Patents used the term “macroblock” consistently
 11 with this definition. Every embodiment in the Motorola Asserted Patents relies upon the
 12 macroblock size of 16×16 in describing the invention. Specifically, FIG. 2 of the Motorola
 13 Asserted Patents depicts a macroblock as a 16×16 pixel region. The accompanying text confirms
 14 this size:

15 FIG. 2 shows that each picture (200) is preferably divided into slices
 16 (202). A slice (202) comprises a group of macroblocks (201). A
 17 macroblock (201) is a rectangular group of pixels. As shown in FIG.
 18 2, a preferable macroblock (201) size is 16 by 16 pixels.

19 Ex. A at 5:54-58; Ex. B at 5:56-60; Ex. C at 5:56-60. The remaining figures of the Motorola
 20 Asserted Patents, to the extent they illustrate the size of a macroblock, show it as a 16×16 pixel
 21 region as well.

22 Previous video coding standards had fixed the size of a macroblock at 16×16 as well:

23 A picture is partitioned into fixed-size macroblocks that each cover
 24 a rectangular picture area of 16×16 samples of the luma component
 25 and 8×8 samples of each of the two chroma components. This
 26 partitioning into macroblocks has been adopted into all previous
 ITU-T and ISO/IEC JTC1 video coding standards since H.261.

² Each pixel of a macroblock has a brightness component, called “luma,” and may have one or more color components, called “chroma.” There is a one-to-one correspondence between pixels and luma samples in a macroblock. Accordingly, the size of a macroblock is sometimes stated as 16×16 pixels instead of 16×16 luma samples.

³ As used herein, “Ex. ___” refers to the corresponding exhibit to the Declaration of Philip S. McCune in Support of Motorola’s and Microsoft’s Joint Claim Chart (Dkt. 158).

Ex. Y at MOTM_WASH1823_0336711; *see also id.* at MOTM_WASH1823_0336713 (“Split into Macroblocks 16x16 pixels”). And the term “macroblock” was understood by persons of ordinary skill in the art to carry the meaning adopted by these standards. *See, e.g.,* Ex. Z at MOTM_WASH1823_0336350 (under “Standard Hybrid Video Codec Terminology,” defining “macroblock” as “a region of size 16x16 in luminance picture and the corresponding region of chrominance information...”); Ex. AA at MOTM_WASH1823_0336338 (“In many video standards, motion compensation is applied to 16x16 macroblocks, while the residual error is DCT coded with 8x8 blocks.”). This extrinsic evidence confirms the meaning of “macroblock” established by the intrinsic evidence.

Rather than accept the well-known definition of “macroblock,” Microsoft takes a single sentence from the above-quoted specification excerpt out of context, treating the partially descriptive statement “[a] macroblock is a rectangular group of pixels” as a complete definition. First, it is improper to base a claim construction on a single statement in the patent specification without considering the specification as a whole. *Budde v. Harley-Davidson, Inc.*, 250 F.3d 1369, 1379-80 (Fed. Cir. 2001) (“It is necessary to consider the specification as a whole, and to read all portions of the written description, if possible, in a manner that renders the patent internally consistent.”); *Fulhorst v. Toyota Motor Corp.*, 2003 WL 25827240, at *14 (E.D. Tex. 2003) (stating that the Federal Circuit has “emphasized the importance of not reading language in the specification in isolation . . . by picking and choosing sentences apart from the context of the entire specification.”). Moreover, this statement is not even a definition. To the contrary, where the inventors intended to provide explicit definitions for terms in the body of the Patents’ specification, they did so, for example, with the terms “encoder” and “decoder”:

[A]s used hereafter, and in the appended claims, unless otherwise specifically denoted, the term “encoder” will be used to refer expansively to all electronic devices that encode digital video content comprising a stream of pictures. The term “decoder” will be used to refer expansively to all electronic devices that decode digital video content comprising a stream of pictures.

Ex. A at 4:64-5:3; Ex. B at 4:64-5:3; Ex. C 4:64-5:3; *see also* Ex. N at MS-MOTO_1823_00001461772 (definitions of decoder, encoder in the incorporated Joint Final Committee Draft of the H.264 Standard).

Moreover, the construction Microsoft proposes does nothing to distinguish a macroblock from other larger features that may be characterized as a rectangular group of pixels, such as a “picture” or a “slice.” The Motorola Asserted Patents distinguish each of these features from a “macroblock.” *See, e.g.*, Ex. A at 5:54-58.⁴ Also, the partial description of “a rectangular group of pixels” does nothing to distinguish other blocks of pixels that the Motorola Asserted Patents describe as being smaller than a macroblock:

FIGS. 3a–f shows that a **macroblock** can be further divided into **smaller sized blocks**. For example, as shown in FIGS. 3a–f, a **macroblock** can further be **divided into block sizes of 16 by 8 pixels** (FIG. 3a; 300), **8 by 16 pixels** (FIG. 3b; 301), **8 by 8 pixels** (FIG. 3c; 302), **8 by 4 pixels** (FIG. 3d; 303), **4 by 8 pixels** (FIG. 3e; 304), or **4 by 4 pixels** (FIG. 3f; 305). **These smaller block sizes** are preferable in some applications that use the temporal prediction with motion compensation algorithm.

Ex. A at 5:59-67 (emphases added); Ex. B at 5:61-6:3; Ex. C at 5:61-6:3. Clearly, these divisions are only possible if a macroblock is 16×16 pixels to begin with.

Thus, Microsoft’s proposed construction does not serve to identify the essential qualities of a macroblock, or mark its limits, as the term is used in the Motorola Asserted Patents. Further, Microsoft’s attempt to encompass portions of a standard macroblock (i.e., blocks of pixels smaller than 16×16) within the definition of macroblock contradicts the teaching of the Motorola Asserted Patents in, for example, the above-quoted excerpt.

⁴ As defined in the Motorola Asserted Patents, “slices” are components of a picture. A “macroblock” is a component of a slice. And “blocks” are components of macroblocks. As shown by Figures 2 and 3 of the Motorola Asserted Patents, each of these components can describe a rectangular group of pixels. In addition, a “processing block” can also be described as a rectangular group of pixels. To avoid confusion of terms, Motorola notes that a “processing block” as used in the ‘376 patent claims is expressly distinguishable from “blocks.” As defined in the ‘376 patent, each “processing block” contains macroblocks, and each macroblock contains a plurality of blocks. Ex. C at 19:18-20.

Importantly, the Motorola Asserted Patents expressly distinguish among adaptive frame/field coding on a macroblock and on a pair of macroblocks. But if the term “macroblock” is read broadly to include any size rectangular group of pixels, the difference between a single macroblock and, for example, a pair of macroblocks would be lost. Under Microsoft’s construction, the former (as depicted in FIG. 5) could be understood as either a single 16×16 macroblock or two 16×8 macroblocks; the latter (as depicted in FIGS. 7-8) could be understood as either a pair of 16×16 macroblocks or a single 16×32 macroblock. This would render meaningless the distinctions the Patents carefully draw between single macroblocks and macroblock pairs.

(ii) “decoding at least one of said plurality of smaller portions at a time . . .”

Claim Term for Construction	Proposed Constructions
decoding at least one of said plurality of smaller portions at a time in frame coding mode and at least one of said plurality of smaller portions at a time in field coding mode (’374 Patent Claim 8)	Motorola - decoding more than one macroblock together in frame coding mode and more than one macroblock together in field coding mode
	Microsoft - removing the frame coding mode from more than one macroblock together and removing the field coding mode from more than one macroblock together to obtain at least one of a plurality of decoded smaller portions

The parties dispute whether, as used in the Motorola Asserted Patents, “decoding” carries its plain and ordinary meaning (as Motorola contends), or whether “decoding” should be understood to require “removing [a] mode” (as Microsoft contends).⁵ Motorola’s proposed construction should be adopted.

“Decoding” is a word that has a plain and ordinary meaning to lay persons and persons of ordinary skill alike. Here, there is nothing to suggest that “decoding” should be ascribed any special meaning. Indeed, the specification explains:

After the compressed video data has been transmitted, *it must be decoded, or decompressed*. In this process, the transmitted video data is processed to generate approximation data that is substituted into the video 65 data to replace the “non-essential” data that was removed in the coding process.

⁵ The parties agree that, as used in this phrase, the language “at least one of said plurality of smaller portions at a time” means “more than one macroblock together.”

Ex. A at 1:62-67 (emphasis added).

Nonetheless, Microsoft proposes a construction that eschews the ordinary meaning of “decoding” and contorts the operation claimed. Decoding is not “removing [a] mode.” Rather, as the ’374 Patent explains, decoding processes operate “*in a mode*.” Ex. A at 16:12-59 (explaining what happens if designated macroblock pairs are “decoded *in [field/frame] mode*”) (emphasis added); *id.* at 8:46-49 (“In AFF coding at the macroblock level, a frame/field flag bit is preferably included in a picture's bitstream to indicate **which mode**, frame mode or field mode, **is used** in the encoding of each macroblock.” (emphases added)); *see also* Ex. N at MS-MOTO_1823_00001461781 & Fig. 6-4, 1461837 (“A macroblock pair can be decoded in either frame or field decoding mode.”).

Additionally, to the extent “removing” is related to coding processes, the Patents explain that “removing” of data is involved in encoding, not decoding.

The general idea behind video coding is to remove data from the digital video content that is “non-essential.” The decreased amount of data then requires less bandwidth for broadcast or transmission. After the compressed video data has been transmitted, it must be decoded, or decompressed. In this process, the transmitted video data is processed to generate approximation data that is substituted into the video data to replace the “non-essential” data that was removed in the coding process.

Ex. A at 1:59-67. During a decoding process, data is “replaced,” not “removed.”

Motorola’s plain language construction should, therefore, be adopted.

(iii) “wherein at least one block within [said] at least one of said plurality of smaller portions [at a time] is encoded in inter coding mode”

Claim Term for Construction	Proposed Constructions
wherein at least one block within [said] at least one of said plurality of smaller portions [at a time] is encoded in inter coding mode (’374 Patent Claims 8, 14)	Motorola - wherein at least one block within [said] at least one of said plurality of smaller portions [at a time] is encoded in inter coding mode, a coding mode that uses information from both within the picture and from other pictures Microsoft - encoding at least one block within at least one of said plurality of smaller portions at a time in inter coding mode

1 The parties disagree about whether the language “is encoded” is descriptive of the claimed
 2 “at least one block” or whether it requires that an additional “encoding” step be performed.⁶ The
 3 former is correct.

4 First, the term “is encoded” is used consistently in the patent claims and specification to
 5 identify to the decoder how the information is encoded, *i.e.*, the status of the information. For
 6 example, at column 7, lines 15-16, the specification teaches: “As shown in FIGS. 6a-d, a
 7 macroblock that *is encoded* in field mode can be divided into four additional blocks.” Ex. A at
 8 7:15-16 (emphasis added). And claim 14 includes the step of “decoding at least one of a plurality
 9 of smaller portions at a time of the encoded picture that *is encoded* in frame coding mode.” Ex. A
 10 at 19:10-12 (emphasis added).

11 Second, claim 8 relates to “[a] method of *decoding* an encoded picture.” Ex. A at 18:44
 12 (emphasis added). Thus, the input to the claimed method is an “encoded picture.” And the second
 13 step of the claim results in a “decoded picture.” Ex. A at 18:54. No encoding is performed in the
 14 claimed process. This context further clarifies that “is encoded” is descriptive of the status of the
 15 claimed “at least one block,” as it is input into the decoding process.

16 Nonetheless, Microsoft proposes that the “wherein” clause should be construed to require a
 17 separate encoding step. Microsoft’s proposed construction is wrong. As an initial matter,
 18 Microsoft’s proposed construction defies logic, as it would insert an “encoding” step into a claim
 19 that is explicitly directed to “decoding.” Moreover, as a matter of patent claim drafting practice,
 20 steps of a method claim are usually recited in the gerund form, *e.g.*, “decoding,” “using,”
 21 “encoding.” See Robert C. Faber, *Faber on Mechanics of Patent Claim Drafting* 4-4 (Practicing
 22 Law Institute 6th ed. 2011) (2008). Passive forms—*e.g.*, “is encoded”—are not used for the
 23 purpose of claiming steps. Jeffery G. Sheldon, *How to Write a Patent Application* 7-49
 24 (Practicing Law Institute 2d ed. 2011) (2009) (“A method claim recites a series of steps, usually
 25

26 ⁶ To avoid confusion, Motorola’s proposed construction further explains what “inter coding mode” is. Motorola does not understand this portion of its construction to be a source of dispute.

recited in the verb gerund or “ing” form. This is an active form of a verb; passive forms are not used.”).

This Court should construe the disputed term consistently with the claim language, the Patent’s specification and patent claim drafting practice, such that “is encoded” is understood to be descriptive of the status of the claimed “at least one block,” *i.e.*, that it is in an encoded state. No additional step is required.

(iv) “using said plurality of decoded [smaller portions/processing blocks] to construct a decoded picture”

Claim Term for Construction	Proposed Constructions
using said plurality of decoded [smaller portions/processing blocks] to construct a decoded picture (‘374 Patent Claims 8, 14; ‘375 Patent Claims 6, 13, 17; ‘376 Patent Claims 14, 22, 30)	Motorola - <i>No construction necessary.</i> <i>If construed:</i> generating a decoded picture from a plurality of decoded [smaller portions/processing blocks] Microsoft - assembling the decoded [smaller portions/processing blocks] to form a decoded “picture”

Motorola believes that the plain and ordinary language of this claimed phrase is readily understood, such that special construction is not necessary. But, in view of the parties’ apparent dispute over this phrase, Motorola has proposed a construction that it believes more accurately reflects the plain meaning of the phrase claimed.

The specification of the Motorola Asserted Patents explains that the process of constructing a decoded picture (also called “reconstruction”) involves the use of decoded smaller portions (in the case of the ’374 and ’375 patents) or decoded processing blocks (in the case of the ’376 patent). But that is not all that is involved. The decoded units are not merely assembled, as Microsoft proposes. Rather, additional processing is performed, which may involve, for instance, the use of motion vectors. Ex. A at 6:1-37; Ex. C at 6:4-40. And in some cases, “[a] skipped macroblock . . . is reconstructed by copying the co-located macroblock in the most recently coded reference picture.” Ex. A at 12: 60-62; Ex. C at 12:63-65.

It would be improper to ignore the possibility (indeed, the likelihood) that the decoded units will not simply be assembled, but will instead be used in additional processes that will result

in the generation of a decoded picture. Motorola's proposed construction contemplates this and should thus be adopted.

(v) "wherein at least one motion vector is received for said at least one block within at least one of said plurality of smaller portions"

Claim Term for Construction	Proposed Constructions
wherein at least one motion vector is received for said at least one block within at least one of said plurality of smaller portions ('374 Patent Claims 9, 15)	Motorola - <i>No construction necessary.</i> <i>If construed:</i> wherein at least one value is received for said at least one block within at least one of said plurality of smaller portions, from which an amount of motion may be determined
	Microsoft - receiving as part of the bitstream at least one value containing the amount of temporal motion required for the image to move to a new temporal position in the picture for each "said at least one block within at least one of said plurality of smaller portions"

Motorola believes that the plain and ordinary language of this claimed phrase is readily understood, such that special construction is not necessary. But, in view of the parties' apparent dispute over this phrase, Motorola has proposed a construction that it believes more accurately reflects the plain meaning of the phrase claimed.

The parties dispute whether the claim language "is received" adds a step of receiving to the claim. It does not. As explained in Section (iii), gerunds, not passive verb forms, are used to claim steps. Sheldon at 7-49. Thus, the passive "is received" language embedded in this "wherein" clause should not be construed as adding an additional step of "receiving" to the claim.

In addition, Microsoft contends that the received motion vector is a value "**containing** the amount of temporal motion required for the image to move to a new temporal position in the picture." But the specification clearly teaches that the decoder receives only a value from which the amount of motion may be determined. More specifically, as taught by the Motorola Asserted Patents, an encoder will not send the amount of motion as a discrete value, because the encoder will instead compress that information for efficient transmission:

Each block in a frame or field based macroblock can have its own motion vectors. The motion vectors are spatially predictive coded. According to an embodiment of the present invention, in inter coding, prediction motion vectors (PMV) are also calculated for each block. The algebraic difference between a block's PMVs and

1 its associated motion vectors is then calculated and encoded. This
2 generates the compressed bits for motion vectors.

3 Ex. A at 9:38-45. The compressed bits represent the motion vector data that is encoded. On the
4 decoding side, Claims 10-12, which are dependent on Claim 9, claim the use of the value that is
5 received from which the amount of motion may be determined. *See also* Joint Final Committee
6 Draft, Ex. N at MS-MOTO_1823_00001461838-40.

7 In support of its construction, Microsoft cites to the '374 Patent at 6:26-29: "motion
8 vectors that represent the amount of temporal motion required for the image (403) to move to a
9 new temporal position in the picture N (402)." But in its construction, which recites this language
10 *almost* verbatim, Microsoft changes "represent the amount" to "containing the amount." Herein
11 lies the problem—"represent" is not synonymous with "contain."⁷ And as explained above, this
12 difference is significant. The received motion vector is an encoded representation of an amount of
13 temporal motion; it need not contain that amount.

14 Motorola's proposed construction should be adopted.

15
16
17
18
19
20
21
22
23
24
25
26 ⁷ Compare The American Heritage College Dictionary 1158 (3d ed. 2000) (defining "represent" as "To stand for; symbolize.") to *id.* at 300 (defining "contain" as "To have within; hold.").

(vi) “means for decoding at least one of a plurality of smaller portions . . . wherein at least one block within at least one of said plurality of smaller portions at a time is encoded in inter coding mode”

Claim Term for Construction	Proposed Constructions
means for decoding at least one of a plurality of smaller portions at a time of the encoded picture that is encoded in frame coding mode and at least one of said plurality of smaller portions at a time of the encoded picture in field coding mode, wherein each of said smaller portions has a size that is larger than one macroblock, wherein at least one block within at least one of said plurality of smaller portions at a time is encoded in inter coding mode ('374 Patent Claim 14)	<p>Motorola – Function: Decoding at least one of a plurality of smaller portions at a time of the encoded picture that is encoded in frame coding mode and at least one of said plurality of smaller portions at a time of the encoded picture in field coding mode, wherein each of said smaller portions has a size that is larger than one macroblock</p> <p>Structure: Decoder, and equivalents thereof</p> <p>Microsoft – Function: removing the frame coding mode from more than one macroblock together and removing the field coding mode from more than one macroblock together to obtain at least one of a plurality of decoded smaller portions</p> <p>Structure: a processor, application specific integrated circuit (ASIC), field programmable gate array (FPGA), coder/decoder (CODEC), or digital signal processor (DSP) performing the algorithm of: in field mode, creating in memory one or more macroblocks each containing one field and one or more macroblocks each containing the other field and processing each such macroblock together with the other macroblocks to create in memory at least two macroblocks containing lines from both fields and in frame mode, creating in memory one or more macroblocks each containing lines from both fields and processing each such macroblock together to create in memory at least two macroblocks containing lines from both fields</p>

As stated in the claim, the function performed by the claimed means is

decoding at least one of a plurality of smaller portions at a time of the encoded picture that is encoded in frame coding mode and at least one of said plurality of smaller portions at a time of the encoded picture in field coding mode, wherein each of said smaller portions has a size that is larger than one macroblock.

That is precisely what Motorola proposes. Microsoft, in contrast, seeks to further limit this functional language by construing it as “removing the frame coding mode from more than one macroblock together and removing the field coding mode from more than one macroblock together to obtain at least one of a plurality of decoded smaller portions.” But “[u]nder § 112, ¶ 6, a court may not import functional limitations that are not recited in the claim, or structural limitations from the written description that are unnecessary to perform the claimed function.”

1 *Wenger Mfg., Inc. v. Coating Machinery Sys., Inc.*, 239 F. 3d 1225, 1233 (Fed. Cir. 2001) (citation
2 omitted). Therefore, the Court must reject Microsoft's attempt to limit the claimed function.

3 Moreover, even if the Court believes that further construction of the functional language is
4 required, Motorola submits that Microsoft's proposed construction of the function is incorrect for
5 at least the reasons stated in connection with the "decoding" step addressed in Section (ii), above.
6 Additionally, Microsoft's proposed construction ignores the additional claim language "of the
7 encoded picture that is encoded in frame coding mode" and "of the encoded picture in field coding
8 mode." This is contrary to law. *Biocon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir.
9 2006) ("[C]laims are interpreted with an eye toward giving effect to all terms in the claim.").

10 The parties also disagree on the structure disclosed in the '374 Patent that performs the
11 claimed function. The structure disclosed in the patent is a decoder, and equivalents thereof.
12 Ex. A at 4:58-59 ("the decoder decodes the pictures."). Decoders are well known structures in the
13 field of processing digital video content, and are implemented in hardware and software. *See*
14 *Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1379-80 (Fed. Cir. 1999) (stating that
15 disclosed structure may be implicit in patent's written description if clear to a person of ordinary
16 skill in the art); *Creo Prods., Inc. v. Presstek, Inc.*, 305 F.3d 1337, 1347 (Fed. Cir. 2002).

17 Microsoft points to an exemplary list of decoders identified in the patent in hopes of
18 limiting the claimed structure to just those examples. But the Patent's specification discloses that
19 the term is not limited to the examples: "The term 'decoder' will be used to refer expansively to
20 all electronic devices that decode digital video content comprising a stream of pictures." Ex. A at
21 5:1-3.

22 Microsoft seeks to limit the claimed structure further by adding that the structure performs
23 the algorithm of

24 in field mode, creating in memory one or more macroblocks each
25 containing one field and one or more macroblocks each containing
26 the other field and processing each such macroblock together with
the other macroblocks to create in memory at least two macroblocks
containing lines from both fields and in frame mode, creating in

memory one or more macroblocks each containing lines from both fields and processing each such macroblock together to create in memory at least two macroblocks containing lines from both field.

This is improper, for example, because neither the claims nor the specification limit the structure to a decoder in which macroblocks are processed “in memory.” More, Microsoft’s proposed construction, read in its entirety, improperly inserts an “encoding” step into a claim that is explicitly directed to “decoding.” As with any other claim element, it is improper to import unclaimed functions into a means-plus-function claim element. *See Generation II Orthotics, Inc. v. Med. Tech., Inc.*, 263 F.3d 1356, 1364-65 (Fed. Cir. 2001); *Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999).

Microsoft’s complex rewrite of the function, and its importation of a complex algorithm involving encoding, should be rejected; and Motorola’s straightforward construction should be adopted.

(vii) “means for using said plurality of decoded smaller portions to construct a decoded picture”

Claim Term for Construction	Proposed Constructions
means for using said plurality of decoded smaller portions to construct a decoded picture (‘374 Patent Claim 14; ‘375 Patent Claim 13)	Motorola – Function: using said plurality of decoded smaller portions to construct a decoded picture
	Structure: Decoder, and equivalents thereof
	Microsoft – Function: assembling the decoded smaller portions to form a decoded “picture” Structure: a processor, application specific integrated circuit (ASIC), field programmable gate array (FPGA), coder/decoder (CODEC), or digital signal processor (DSP) performing the algorithm of assembling a decoded picture using the decoded [smaller portions/processing blocks] like bricks in a wall

As stated in the claim (and proposed by Motorola), the function performed by the claimed means is “using said plurality of decoded smaller portions to construct a decoded picture.”

Microsoft seeks to further limit this functional language by construing it as “*assembling* the decoded smaller portions to form a decoded ‘picture.’” However “[u]nder § 112, ¶ 6, a court may not import functional limitations that are not recited in the claim, or structural limitations from the

1 written description that are unnecessary to perform the claimed function.” *Wenger Mfg.*, 239 F.3d
2 at 1233. Therefore, the Court must reject Microsoft’s attempt to limit the claimed function.

3 Moreover, even if the Court believes that further construction of the functional language is
4 required, Microsoft’s proposed construction of the function is incorrect for at least the reasons
5 stated in the context of the “using” step, which employs similar language, in Section (iv), above.

6 The parties further disagree on the structure disclosed in the ’374 and ’375 Patents that
7 performs the function. The structure disclosed in the patents is a decoder, and equivalents thereof.
8 Ex. A at 4:58-59 (“the decoder decodes the pictures.”); Ex. B at 4:58-59.

9 Unique to the parties’ disagreement here, Microsoft seeks to limit the function performed
10 by the structure by adding that the structure performs “the algorithm of assembling a decoded
11 picture using the decoded smaller portions like bricks in a wall.” This is improper because neither
12 the claims nor the specification limits the method of construction to be “assembly,” “like bricks in
13 a wall.” As with any other claim element, it is improper to import unclaimed functions into a
14 means-plus-function claim element. *Generation II Orthotics, Inc.*, 263 F.3d at 1364-65; *Micro*
15 *Chem., Inc.*, 194 F.3d at 1258.

(viii) “means for selectively decoding at least one of a plurality of smaller portions . . .”

Claim Term for Construction	Proposed Constructions
<p>means for selectively decoding at least one of a plurality of smaller portions at a time of the encoded picture that is encoded in frame coding mode and at least one of said plurality of smaller portions at a time of the encoded picture in field coding mode, wherein each of said smaller portions has a size that is larger than one macroblock, wherein at least one block within at least one of said plurality of smaller portions is encoded in intra coding mode at a time ('375 Patent Claim 13)</p>	<p>Motorola – Function: selectively decoding at least one of a plurality of smaller portions at a time of the encoded picture that is encoded in frame coding mode and at least one of said plurality of smaller portions at a time of the encoded picture in field coding mode</p> <p>Structure: Decoder, and equivalents thereof</p>
	<p>Microsoft – Function: choosing to remove the frame coding mode from more than one macroblock together or to remove the field coding mode from more than one macroblock together to obtain at least one of a plurality of “decoded smaller portions”</p> <p>Structure: a processor, application specific integrated circuit (ASIC), field programmable gate array (FPGA), coder/decoder (CODEC), or digital signal processor (DSP) performing the algorithm of: in field mode, creating in memory one or more macroblocks each containing one field and one or more macroblocks each containing the other field and processing each such macroblock together with the other macroblocks to create in memory at least two macroblocks containing lines from both fields and in frame mode, creating in memory one or more macroblocks each containing lines from both fields and processing each such macroblock together to create in memory at least two macroblocks containing lines from both fields</p>

As stated in the claim, the function performed by the claimed means is

selectively decoding at least one of a plurality of smaller portions at a time of the encoded picture that is encoded in frame coding mode and at least one of said plurality of smaller portions at a time of the encoded picture in field coding mode

1 Again, this is precisely Motorola's construction. Microsoft seeks to further limit this functional
2 language by construing it as "choosing to remove the frame coding mode from more than one
3 macroblock together or to remove the field coding mode from more than one macroblock together
4 to obtain at least one of a plurality of 'decoded smaller portions.'" However, as noted above, "a
5 court may not import functional limitations that are not recited in the claim, or structural
6 limitations from the written description that are unnecessary to perform the claimed function.
7 *Wenger Mfg.*, 239 F. 3d at 1233. Therefore, the Court must reject Microsoft's attempt to limit the
8 claimed function.

9 Moreover, even if the Court believes that further construction of the functional language is
10 required, Microsoft's proposed construction of the function is incorrect for at least the reasons
11 stated in the context of the "decoding" step, as discussed in Section (ii), above. Additionally,
12 Microsoft's proposed construction would convert the claimed function from a "decoding"
13 operation to a "choosing" operation, which is also incorrect.

14 The parties further disagree on the structure disclosed for performing the claimed function.
15 Motorola submits the structure is simply the decoder, as for the term in Section (vi). Indeed, the
16 parties' dispute on this issue is not substantially different from the term construed in Section (vi).
17 Therefore, the parties' constructions are substantially the same here as there. Accordingly, the
18 explanation as to why the structure is the decoder is incorporated here from Section (vi) by
19 reference.

(ix) “means for decoding at least one of a plurality of processing blocks at a time . . .”

Claim Term for Construction	Proposed Constructions
<p>means for decoding at least one of a plurality of processing blocks at a time, each processing block containing a pair of macroblocks or a group of macroblocks, each macroblock containing a plurality of blocks, from said encoded picture that is encoded in frame coding mode and at least one of said plurality of processing blocks at a time that is encoded in field coding mode, wherein said decoding is performed in a horizontal scanning path or a vertical scanning path (‘376 Patent Claim 22)</p>	<p>Motorola – Function: decoding at least one of a plurality of processing blocks at a time, each processing block containing a pair of macroblocks or a group of macroblocks, each macroblock containing a plurality of blocks, from said encoded picture that is encoded in frame coding mode and at least one of said plurality of processing blocks at a time that is encoded in field coding mode, wherein said decoding is performed in a horizontal scanning path or a vertical scanning path</p> <p>Structure: Decoder, and equivalents thereof</p>
	<p>Microsoft – Function: removing the frame coding mode from more than one macroblock together and removing the field coding mode from more than one macroblock together to obtain at least one of a plurality of decoded processing blocks</p> <p>Structure: a processor, application specific integrated circuit (ASIC), field programmable gate array (FPGA), coder/decoder (CODEC), or digital signal processor (DSP) performing the algorithm of: in field mode, creating in memory one or more macroblocks each containing one field and one or more macroblocks each containing the other field and processing each such macroblock together with the other macroblocks to create in memory at least two macroblocks containing lines from both fields and in frame mode, creating in memory one or more macroblocks each containing lines from both fields and processing each such macroblock together to create in memory at least two macroblocks containing lines from both fields</p>

As stated in the claim, the function performed by the claimed means is

decoding at least one of a plurality of processing blocks at a time, each processing block containing a pair of macroblocks or a group of macroblocks, each macroblock containing a plurality of blocks, from said encoded picture that is encoded in frame coding mode and at least one of said plurality of processing blocks at a time that is encoded in field coding mode, wherein said decoding is performed in a horizontal scanning path or a vertical scanning path.

1 Again, this is Motorola's construction of the function to be performed.

2 Microsoft seeks to further limit this functional language by construing it as "removing the
3 frame coding mode from more than one macroblock together and removing the field coding mode
4 from more than one macroblock together to obtain at least one of a plurality of decoded processing
5 blocks." Again, a court may not import functional limitations that are not recited in the claim, or
6 structural limitations from the written description that are unnecessary to perform the claimed
7 function." *Wenger Mfg*, 239 F.3d at 1233. Therefore, the Court must reject Microsoft's attempt to
8 limit the claimed function.

9 Moreover, even if the Court believes that further construction of the functional language is
10 required, Microsoft's proposed construction of the function is incorrect for at least the reasons
11 stated in the context of the "decoding" step, as discussed in Section (ii), above. Additionally,
12 Microsoft's proposed construction is incorrect, as it relates to the language "one of a plurality of
13 processing blocks . . . , wherein each of said plurality of processing blocks includes a pair of
14 macroblocks or a group of macroblocks." Indeed, Microsoft proposes the same language be used
15 here—"more than one macroblock"—as Microsoft proposes in the context of the "at least one of
16 said smaller portions" language of other "decoding" functions. In doing so, Microsoft ignores the
17 plain meaning of this claim language, which provides that "each of said plurality of processing
18 blocks includes a pair of macroblocks or a group of macroblocks" in a self-defining manner. And
19 Microsoft further ignores the claim language "from said encoded picture that is encoded in frame
20 coding mode" and "that is encoded in field coding mode." Microsoft's construction is, therefore,
21 incorrect as a matter of law. *Biocon, Inc.*, 441 F.3d at 950.

22 The parties disagree on the structure disclosed. The structure that performs the decoding
23 function is, simply, the decoder. The parties' dispute here is not substantially different from the
24 term construed in Section (vi) and that analysis is incorporated here by reference.
25
26

(x) “means for using said plurality of decoded processing blocks to construct a decoded picture”

Claim Term for Construction	Proposed Constructions
means for using said plurality of decoded processing blocks to construct a decoded picture ('376 Patent Claim 22)	Motorola – Function: using said plurality of decoded processing blocks to construct a decoded picture
	Structure: Decoder, and equivalents thereof
	Microsoft – Function: assembling the decoded processing blocks to form a decoded “picture” Structure: a processor, application specific integrated circuit (ASIC), field programmable gate array (FPGA), coder/decoder (CODEC), or digital signal processor (DSP) performing the algorithm of assembling a decoded picture using the decoded [smaller portions/processing blocks] like bricks in a wall

As stated in the claim, the function performed by the claimed means is “using said plurality of decoded processing blocks to construct a decoded picture.” The parties’ disagreement on this point parallels that discussed in Section (vii), above.

The parties disagree over the claimed structure. Again, the structure that performs the claimed decoding function is the decoder. This disagreement parallels that as discussed above in Section (vii) and that analysis applies here as well.

DATED this 3rd day of February, 2012.

SUMMIT LAW GROUP PLLC

By /s/ Ralph H. Palumbo

Ralph H. Palumbo, WSBA #04751

Philip S. McCune, WSBA #21081

Lynn M. Engel, WSBA #21934

ralphh@summitlaw.com

philm@summitlaw.com

lynne@summitlaw.com

By /s/ K. McNeill Taylor, Jr.

K. McNeill Taylor, Jr.
MOTOROLA MOBILITY, INC.
MD W4-150
600 North U.S. Highway 45
Libertyville, IL 60048-1286
Phone: 858-404-3580
Fax: 847-523-0727

And by

Steven Pepe (*pro hac vice*)
Jesse J. Jenner (*pro hac vice*)
Stuart W. Yothers (*pro hac vice*)
Ropes & Gray LLP
1211 Avenue of the Americas
New York, NY 10036-8704
(212) 596-9046
steven.pepe@ropesgray.com
jesse.jenner@ropesgray.com
stuart.yothers@ropesgray.com

Norman H. Beamer (*pro hac vice*)
Gabrielle E. Higgins (*pro hac vice*)
Ropes & Gray LLP
1900 University Avenue, 6th Floor
East Palo Alto, CA 94303-2284
(650) 617-4030
norman.beamer@ropesgray.com
gabrielle.higgins@ropesgray.com

Paul M. Schoenhard (*pro hac vice*)
Kevin J. Post (*pro hac vice*)
Ropes & Gray LLP
One Metro Center
700 12th Street NW, Suite 900
Washington, DC 20005-3948
(202) 508-4693
paul.schoenhard.@ropesgray.com
kevin.post@ropesgray.com

***Attorneys for Motorola Solutions, Inc., Motorola
Mobility, Inc., and General Instrument
Corporation***

CERTIFICATE OF SERVICE

I hereby certify that on this day I electronically filed the foregoing with the Clerk of the Court using the CM/ECF system which will send notification of such filing to the following:

Arthur W. Harrigan, Jr., Esq.
Christopher T. Wion, Esq.
Shane P. Cramer, Esq.
Danielson, Harrigan, Leyh & Tollefson LLP
arthurh@dhlt.com
chrisw@dhlt.com
shanec@dhlt.com

Brian R. Nester, Esq.
David T. Pritikin, Esq.
Douglas I. Lewis, Esq.
John W. McBride, Esq.
Richard A. Cederoth, Esq.
David Greenfield
Sidley Austin LLP
bnester@sidley.com
dpritikin@sidley.com
dilewis@sidley.com
jwmcbride@sidley.com
rcederoth@sidley.com
david.greenfield@sidley.com

T. Andrew Culbert, Esq.
David E. Killough, Esq.
Microsoft Corp.
andycu@microsoft.com
davkill@microsoft.com

DATED this 3rd day of February, 2012.

/s/ Marcia A. Ripley
Marcia A. Ripley